with the author's
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ON

STRICTURES OF THE INTESTINE:

WITH

REMARKS UPON STATISTICS AS A GUIDE TO DIAGNOSIS AND TREATMENT.

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ON STRICTURES OF THE INTESTINE: WITH REMARKS UPON STATISTICS AS A GUIDE TO DIAGNOSIS AND TREATMENT.*

THE subject of intestinal obstruction has been so exhaustively treated from all sides, that it may be thought almost unnecessary to add anything to what has been already written on the question. But, during the past few years, our attention has been several times directed to the subject, owing to the comparatively large number of cases, either in the care of our colleagues or under our personal supervision, that have fallen under our observation at the Middlesex Hospital. The study of these cases has led us to carefully collate a large amount of evidence with respect to the causes and effects of that class of obstructions included under the term of "stricture" of the bowel; and the conclusions at which we have arrived seem to us worthy of some consideration, as indicating more precisely than has yet been attempted the particular lines of treatment to be adopted in such cases, so distressing in their symptoms and so fatal in their results. We wish also to call attention to the methods of diagnosis employed for detecting the seat of a stricture, when once it has been ascertained that the patient is suffering from this form of obstruction.

1. *Situation of Strictures.*—With regard to this, indeed, we have nothing novel to propound; for the ground has been already fully gone over by writers, such as Dr. Hilton Fagge in his article in *Guy's Hospital Reports* (vol. xiv, 1868)—an article which has justly become the standard of reference for all writers since it was published; Dr. Brinton, in his posthumous essay on Intestinal Obstruction, and others.

* Read in the Section of Surgery at the Annual Meeting of the British Medical Association in Manchester, August 1877.

We have, however, deemed it worth while to seek for fresh facts in this direction ; and the result of our search has been, that in all respects we have been able to adduce strong confirmation of the general truth of the statements made by those authors. Our sources of inquiry have been the *post mortem* records of the Middlesex Hospital from the year 1844 to the present time (with the exception of the year 1852 and the greater part of 1851); and the *Transactions of the Pathological Society* since its formation in the year 1846. From the former source, we have collected thirty-one, and from the latter, thirty-two cases of stricture of the intestine. It is justly remarked by Dr. Fagge that the *Transactions* of a Society do not afford a correct basis for statistical inference, seeing that they include only selected cases, interesting from their rarity or some peculiarity incident to the case. This is doubtless true ; but with respect to the subject under consideration, the *Transactions of the Pathological Society* are of especial value. For here, if anywhere, we should find recorded instances of stricture in unusual and rare situations, and a certain safeguard would be found against drawing too hard and fast a line in one's conclusions. It is interesting to note, therefore, that whereas the number of cases of rectal stricture to be found in these volumes is comparatively small and is below the average drawn from other sources, yet, on the other hand, only one case has been brought before that Society in which the disease giving rise to the obstruction was seated above the cæcum. Bearing in mind Dr. Fagge's reservation, we think we may fairly quote the *Pathological Transactions* in our statistical deductions. We must also add that none of the cases have been quoted twice, care having been taken to exclude from the list culled from the Society any case that had been first entered in the Middlesex Hospital records. We find, then, that out of a total of thirty-one cases of stricture of the intestines examined after death at the Middlesex Hospital, in no fewer than twenty-seven was the disease situated in the large intestine. Of the remaining four cases, in one it involved the ileo-cæcal valve; in another, the ileum at its lower end; in a third, the upper part of the ileum; and in the fourth, the jejunum. No cases of stricture of the small intestine are recorded by Dr. Brinton, by Dr. Fagge, nor by M. Duchaussoy, whose figures are quoted by Dr. Fagge ; so that we may hold that instances of stricture of the ileum or above the ileum are of extreme rarity. Out of the thirty-two cases recorded in the *Pathological Transactions*, thirty-one involved the large bowel alone, and one the lower end of the ileum and the cæcum.

The case of jejunal stricture referred to occurred at the Middlesex Hospital in 1867, and is recorded as being due to cicatrisation of an ulcer. The patient was a man aged 58, who died from peritonitis consequent upon perforation above the stricture. Of the cases of ileal disease, one was that of a male aged 65, also in 1867, in whom cancer of the lower end of the ileum had determined invagination of the gut into the cæcum, and death in this case also was due to peritonitis from perforation above the stricture. The other instance occurred in 1859; it was in a female aged 42, and was a cancerous stricture of the ileum at its upper extremity, secondary to cancer of the breast. A somewhat parallel case has come under the notice of one of us in the *post mortem* room of the Middlesex Hospital during the present year. It was a case of primary epithelial cancer of the uterus, with an unusual dissemination of secondary growths, one of which had involved the lower end of the jejunum in all its coats, so as to produce an annular constriction half an inch in width. It had given rise to no symptoms during life, although the stricture was so small as to admit only of the passage of a No. 7 catheter. A mesenteric gland in connection with the affected bowel was also infiltrated. We may also refer to the two cases, out of the total number of sixty-three, in which the disease, in both cases cancer, attacked the cæcum as well as the ileum at its lower extremity. One of these was admitted into the Middlesex Hospital last October. She was only twenty-eight years of age; had been losing flesh for six months, and for three months had suffered from abdominal pain, constipation, and vomiting, the last three weeks being marked by continued enlargement of the abdomen. The lower bowel contained fæces, and daily the patient passed a small quantity. There were constant attacks of severe pain, during which the coils of small intestines could be seen on the surface. Acupuncture afforded but slight relief; and death soon followed from peritonitis due to perforation of the cæcum, which, at its valve, was the seat of a luxuriant growth of epithelial cancer. The other case is recorded in the *Pathological Transactions*, vol. xii, p. 117, by Mr. G. Lawson. The patient was a woman fifty-six years of age, in whom complete obstruction had lasted for only about a week before death. The site of the ileo-cæcal valve was occupied by a dense scirrhous mass, which infiltrated also the wall of the cæcum. A similar case to the first of these is to be found in Dr. Fagge's paper (*loc. cit.*, case No. 33).

In the remaining cases, *i.e.*, in fifty-eight out of sixty-three, the seat of stricture was in the large intestine. Of the twenty-seven cases in the Mid-

dlesex Hospital, we find that in twenty-four the stricture was situated in the sigmoid flexure and rectum, there being twelve instances in each of these sites ; two were in the middle portion of the transverse colon, and one was in the descending colon. It may be observed that in no case was the cæcum (alone) attacked, nor the ascending colon, nor either of the flexures of the transverse colon, the latter being generally regarded as more frequent seats of stricture than is the centre of the arch. The figures obtained from the *Pathological Transactions* accord better with generally accepted views, for there we find one case of disease of the cæcum recorded, three of the hepatic, two of the splenic flexure, and two of the middle part of the transverse colon, two of the descending colon, thirteen of the sigmoid flexure, and eight of the rectum. Thus, in round numbers, nearly three-fourths of the cases of stricture involve the lower end of the intestine, the number met with in the sigmoid flexure and in the rectum being practically equal ; whilst of the remaining one-fourth, the ascending colon is the rarest, and the cæcum the next rarest seat, the remainder being equally shared by the three regions of the transverse colon and the descending colon. In all but an insignificant minority of cases, the disease is seated below the cæcum ; and this broad general conclusion approximates tolerably closely with the statements of the writers above named. We could point out, however, that Dr. Brinton's figures appear to us to give rather too high a range for affections of the cæcum and ascending colon.

II. *Nature of the Strictures.*—In general terms, it may be said that the majority of the strictures are malignant, and this notwithstanding the fact that few are associated with secondary infection of remote viscera. This may be explained by reason of the new growths mostly belonging to the class of epitheliomata, which are notoriously the most local of all forms of cancer, and also possibly because they lead to fatal results before the system comes to be infected. In a case under our care last year of epithelioma of the sigmoid flexure, an annular ulcer with thickened infiltrated margins, and a depressed and ulcerating base, which gave to the gut externally the appearance of having been constricted by a tight cord, the epithelial new growth infiltrated the coats of the bowel for about half an inch above and below the constriction ; but there was absolutely no secondary infection in any part. A case precisely similar as to the form of local disease in the sigmoid flexure, which was in the Hospital in 1875, was asso-

ciated with small secondary nodules in the liver and in the cutaneous tissues of the umbilicus. We think, then, that even some cases which in past times have been recorded as instances of simple stricture may really have the same fundamental structure histologically. To the naked eye, they conform to the type of "annular ulcers", but microscopically they are composed of an exuberant growth of cylindrical epithelium in the deeper tissues of the wall of the gut, and frequently with small outbuds on the serous coat. In the cæcum, this growth may attain a larger size, and, as in the case above related, may form a large cauliflower excrescence, partially filling that portion of bowel. A smaller number of cases are due to scirrhous cancer, or to colloid; whilst there remain others, which from the presence of ulceration elsewhere in the bowel and the absence of any signs of infiltrating cancer, may be attributed to the cicatrisation of tubercular, dysenteric, or syphilitic ulceration; the latter, as is well known, being chiefly limited to the rectum. Analysing, as before, the sixty-three cases we have collected, we find them recorded or described as follows. Out of the thirty-two cases to be found in the *Pathological Transactions*, eighteen are recorded as cancer, eight as simple stricture, or stricture following ulceration; seven of these being in the sigmoid flexure, it is possible that some may have been of the nature of epithelioma. There is one case of stricture of the sigmoid attributed to tubercular ulceration, and in two at the same region the nature of the stricture is not alluded to. There remain two instances of supposed syphilitic stricture of the rectum, and one attributed to cicatrisation of a dysenteric ulcer in the same portion of the canal. In the thirty-one cases recorded in the Middlesex Hospital register, twenty were undoubtedly cancerous; seven are described as simple strictures (but some of these, again, were in the form of "annular ulcers"), and four as "ulceration with stricture".

III. *Perforation.*—In the course of inquiry, we were struck particularly by the fact that in a large number of cases in which the obstruction was complete and where it remained until death, unrelieved by the operation of colotomy, the fatal issue was brought about by the occurrence of perforation of the gut either just above the seat of stricture or at the cæcum; and it is upon the latter complication that we desire especially to insist. Its occurrence in several cases under our own notice brought the fact forcibly before us, and has largely influenced us in advising a definite line of procedure. The occurrence of inflam-

mation and ulceration of the intestines from simple accumulation of their contents is notorious. The history of ordinary typhlitis is an illustration of this; and, not to mention the, unhappily, too frequent instances of perforation of the vermiform appendix from impacted fæces, we could instance several cases in which the cæcum itself and other portions of the canal have suffered extremely from a like cause, even to the extent of perforation. In the class of cases we are particularly considering, the cæcum is usually the point to suffer most severely; but here again we proclaim no novelty;* we only affirm that the fact has not perhaps received sufficient attention. Dr. Hilton Fagge refers to it in his paper—it was met with in four of his cases; and he adds further that Dr. Wilks "had seen, in his private practice, a case of stricture of the colon, which (although it never caused total obstruction) gave rise to accumulation in the cæcum, to inflammation and perforation of this part of the bowel, and consequently to the death of the patient". If we turn to our own experience, one of the most striking instances we have seen was in a female patient thirty-five years of age, who was admitted into the Middlesex Hospital under the care of Dr. Greenhow on November 25th, 1873. She had been losing flesh for the past two years, and during the same time, had been subject to hypogastric pain and more or less constipation, which had become pronounced only for twelve days. She had travelled up from Wales to enter a London hospital; and, on admission, she was evidently dying from peritonitis. She lived but six hours; and after death the obstruction was found to be due to cancer of the body of the uterus invading the rectum; all the intestines were enormously distended with fæcal matter, and fæcal matter had escaped in large quantity into the peritoneal cavity. This extravasation was due to a perforation of the cæcum, the walls of which were extensively ulcerated. In 1874, a man, thirty-two years of age, with cancer of the rectum, also died from peritonitis due to perforation of the cæcum, there being no ulceration present in any other part of the greatly distended bowels. In 1876, two cases which came under our notice of annular stricture of the sigmoid, both in females, also terminated in this manner. In one,

* Seventeen years ago, it was alluded to as a well known fact by Dr. J. C. Messer, *àpropos* of a case of stricture of the rectum, complicated by perforation of the cæcum. He says: "The existence of ulceration of the cæcum in such cases has been remarked, and was present in this instance. The explanation of this circumstance would appear to be, that the walls of the cæcum are more easily affected by the distending pressure of accumulating fæces, which ultimately results in ulceration." *Pathological Transactions*, vol. xi, p. 110.

the cæcum was opened shortly before death ; and in the other, the ascending colon ; but in both, the operation was done too late to prevent the perforation of the cæcum, which, in one case at least, must have been established before the operation. Lastly, in the remarkable case of epithelial cancer of the ileo-cæcal valve already referred to, which allowed the entrance of fæcal matter into, but partially hindered its exit from the cæcum, there was extreme disorganisation of the walls of this *cul-de-sac*.

We need not here dwell upon these cases, but they all illustrate forcibly the fact of cæcal ulceration in cases of stricture even so far removed from the cæcum as the lower end of the rectum. The reason why the cæcum suffers in this way is not far to seek. In cases of simple accumulation, it is generally the chief part to be involved ; and in cases of accumulation from organic stricture beyond, the same causes operate with increased force. These are, first, the shape of the cæcum, a mere *cul-de-sac*, above and on the inner side of which the ileum opens at a right angle. It thus acts as a kind of reservoir, where, in cases of obstruction in the course of the large bowel beyond, it serves as it were for the meeting of the two currents, that, namely, setting downwards from the ileum, and that regurgitated backwards from the seat of obstruction. Its dependent position is a second factor favourable to accumulation within it. More effectual still is its fixity, placed as it is between the abdominal wall in front and the iliacus muscle behind, and only partially invested by peritoneum, except in rare cases. Hence its power of independent movement is very slight ; and that will be lost with the increasing distension. Contrast this with the transverse colon, which being, as a rule, more free, is enabled, so long as its muscular walls retain their tonicity, to empty itself. Further, to all this must be added the constant chafing of the distended gut by the action of the abdominal and iliacus muscles between which it is placed.

We are unable to give any accurate statistical details in support of our assertion of the frequency with which this cæcal ulceration occurs, owing simply to the fact that in a considerable number of cases the state of the intestinal mucous membrane above the stricture has not been put on record, or, if mentioned at all, the description is usually limited to the few inches of bowel in the neighbourhood of the stricture, except in those cases which have proved fatal from perforation. Eliminating twenty-six cases in which the state of the mucous membrane is not described, we find that

ulceration occurred in the cæcum, or in its vicinity, and far removed from the seat of stricture, in fourteen out of thirty-one, a proportion which, judging from our own limited experience, is considerably within the mark.

IV. *Treatment.*—We pass now to the question of treatment, which, we think, should be based upon the knowledge of these facts. Obviously, those cases of rectal cancer must be set aside in which the diagnosis by means of physical examination is easy, or in which the nature of the case has been made out long prior to the supervention of total obstruction. Of course, in such cases, the only rational procedure is that universally pursued by surgeons, viz., left colotomy; and all, in such cases, recognise the futility of delay and the long-lasting relief, for months or even for years, frequently obtained by that operation. But in all other cases, where the history is one of chronic obstruction, where the age of the patient favours the view of cancer, or where it is probable that a stricture of the bowel exists, then, without wasting time over repeated injections, and in administering powerful and harmful purgatives, we think that recourse should speedily be had to colotomy in the right loin. We advise this operation, because in a certain proportion of cases (about one-fourth) the stricture is higher than the sigmoid flexure; because in all these cases, whether the obstructing cause be far from or near to the cæcum, there is undue strain thrown upon that portion of the canal; and because the only chance of a favourable issue (in so far as an operation for relief of symptoms can be said to have a favourable result) obviously lies in giving prompt and early relief to the cæcum thus overstrained. It must be borne in mind that cases have occurred in which, the symptoms pointing to the disease in the sigmoid flexure, the descending colon has been opened and found to be empty, owing to the obstruction being situated in the course of the transverse colon or in one of its flexures. Had the operation of right colotomy been performed, not only would it have been above the seat of stricture, but it would also have at once unloaded the distended cæcum. The danger of delaying this operation cannot be too strictly insisted upon. Unfortunately, in the majority of cases, the surgeon is not called until the obstruction has been already complete for some time, and the cæcum has suffered in proportion. A case of stricture under our care last year, affords an illustration of this. The patient, a woman fifty years of age, was admitted into the Hospital on October 10th, 1876, with a history of complete constipa-

tion of twelve days' standing, unrelieved by purgative medicines. There was great distension of the abdomen to about an equal extent on both sides, perhaps some slight fulness in the right iliac region. There was no vomiting. A long tube was passed *per anum* to the extent of twelve inches; warm water injected into it could not be heard on auscultation to find its way into the cæcum, and was speedily returned, without the passage of either fæces or flatus. When the patient was under the influence of chloroform, the hand was introduced into the lower bowel, without meeting with any obstruction except that which appeared to be a fold of mucous membrane. Right colotomy was performed about six hours after admission, and was followed by marked relief to the distressing symptoms of distension, etc., but the patient sank from peritonitis, dying thirty-six hours after the operation. The peritonitis—which must have been present on admission—was due to ulceration of the coats of the cæcum, leading to extravasation of its contents into the peritoneal cavity. The stricture was confined to the sigmoid flexure. In the twenty-third volume of the *Pathological Transactions* (p. 119), Dr. Bristowe records a case of colloid cancer of the splenic flexure in a young man twenty-three years of age, in which for some days injections appeared to give relief, and in which, at length, the operation of right colotomy was entertained. The patient died, however, a few hours before the morning fixed for the operation, and ten days after his admission into the hospital. There was perforation of the ileum close to the cæcum, the lower end of the small bowel being extensively ulcerated.

But we would go further than this. The operation of right colotomy may have failed in its main object, owing to the disease being situated in the cæcum or small intestine, for so difficult is the diagnosis in cases where the abdomen is uniformly distended that to ascertain the precise seat of a stricture is well-nigh impossible. The ascending colon may then be found collapsed and empty. In such a case, the wound in the loin should be stitched up, and relief afforded to the distended bowels by the operation of enterotomy, or the small bowel may be opened at the loin if thought desirable. The intolerable distress from fæcal and gaseous accumulation endured by the patient is too great to be let pass, without an effort on the part of the surgeon to remove its cause. Possibly he cannot hope to do much more than ease the path to death; but surely that is some gain. The desirability of performing this operation to give relief to over-distended intestines was insisted on by Trousseau (*Lectures on Clinical Medicine*, New Syd. Soc.

Ed., vol. iv, p. 205), who, in his lecture on intestinal obstruction, gives directions as to the performance of enterotomy. He relates, also, four cases in which recourse was had to the operation at his suggestion, and as a final attempt, to relieve symptoms of obstruction. In two of these cases, the patients recovered, both being, probably, cases of volvulus or internal strangulation of the small intestines. In the *Medico-Chirurgical Transactions* for 1872 (vol. lv, p. 267) Mr. McCarthy relates a case of cancer of the stomach involving the splenic flexure, in which, on the advice of Mr. Maunder, he performed enterotomy in the right inguinal region, and with perfect success. The patient died from the cancerous disease and fatty degeneration of the heart, seven weeks after the operation. The operation has also been performed by Mr. Wagstaffe (*St. Thomas's Hospital Reports*, 1873, p. 181), for the relief of great distension and sickness from obstruction due to a pelvic tumour ; and with such success that the patient was alive four years after the operation ; and by Mr. Maunder (*Clinical Society's Transactions*, ix, p. 102), in a case of suspected stricture at the lower part of the ileum. The patient, who was sixty-eight years of age, lived for some months after the operation. It has also been performed by Mr. Bryant with a successful result. For ourselves, we may say that to us it seems that in all such cases, where the distension of the intestines is a source of suffering, as well as of danger, the operation of enterotomy is as imperatively called for as is that of puncture of the bladder in cases of overdistension of that viscus from impermeable stricture, and notwithstanding that fatal disease of the kidney may be already established. We hold that a free opening into the bowel is at once more effectual and safer than the method of acupuncture, which has been frequently adopted of late years. It is true that many may hold with Trousseau that puncture is not dangerous ; but in a recent discussion at the Clinical Society of London, there appeared to be a pretty general consensus of opinion that acupuncture of the bowels was in many cases attended with considerable risk. Mr. Bryant said that in two cases in which he had practised it, fæcal extravasation resulted ; and Dr. Silver, although urging the necessity of the procedure for the relief of overdistension, admitted that in one case, fæcal extravasation had occurred. In Dr. Bristowe's case of stricture at the splenic flexure, fatal from ulceration of the ileum, acupuncture was practised. It produced temporary relief, but seemed to determine the fatal perforation of the bowel. Certainly, this happened in the case of ileo-cæcal cancer under our care last year ; for there

numerous punctures were made into the various distended coils of small intestine, and were followed by a considerable escape of flatus, with slight diminution of the girth of the patient. The operation was also, however, followed by increased violence in the peristalsis of the small intestines, with a proportionately great increase in pain, and the patient died from peritonitis due to perforation of the cæcum. Neither in this, nor in Dr. Bristowe's case, was there evidence of there having been any extravasation at the seats of puncture. There is more risk of such extravasation where the muscular coat has lost its tone and the walls are thinned by distension or spoilt by inflammation. This was well seen in a case of internal strangulation, under the care of Mr. Hulke, at the Middlesex Hospital in 1872, and recorded by him in the *Medical Times and Gazette* (1872, vol. ii, p. 463). In this case, acupuncture was resorted to for the purpose of replacing coils of small intestine which had been drawn out of the abdomen in the search for the constricting band. The puncture allowing not only of the escape of flatus but also of the oozing of fæces, Mr. Hulke laid the bowel open at the spot and made an artificial anus in the small intestine. In Dr. Bristowe's and our own cases, the puncture appeared to be the exciting cause of the perforation of the ulcers produced by the fæcal accumulation, probably by exciting a more ready contraction of the small intestines, owing to the displacement of their contents. Had a free opening been made, however, it is probable that by thus allowing a vent for the escape of the fæces, the cæcum or the lower end of the ileum would not have been exposed to the additional strain caused by the increased peristaltic action. We have three times witnessed the great relief experienced by the operation of enterotomy in these cases; once in the case of Mr. Hulke, just referred to, and again last year in a patient of Dr. Henry Thompson (a case of sigmoid stricture), where the cæcum, already far advanced in ulceration, was laid open in the operation by one of us, and thus exit was given to an enormous quantity of fæces. In both cases—although the patient only survived for a few hours—the relief obtained was very marked. The third case was one of obstruction from intussusception, where twenty-four inches of ileum were removed, and a double artificial anus made. The patient lived twenty hours after the operation, and for many hours was made easy and even cheerful by it (*Transactions of the Pathological Society*, vol. xxviii, p. 131).

v. *Diagnosis.*—What we have to say upon the subject of diagnosis may

be summed up in a very few words. We must confess, with Dr. Fagge, that so far as regards the methods employed for the accurate diagnosis of the seat of a stricture of the intestine, it is often impossible to be sure whether the disease is situated in the small or large bowel; and if it be in the large intestine, its precise situation there is extremely difficult to determine. All the rules based upon the symptoms of the disease have been at different times found wanting; and much the same statement may be made in truth with regard to such aids to diagnosis as are afforded by the amount of fluid that may be injected into the canal, by auscultation over various parts of its course during the injection and even by the passage of the long tube. In every case where digital examination has proved negative, it might be worth while to adopt the method first practised in this country by Mr. Maunder, largely employed by Professor Simon of Heidelberg, and advocated by Mr. Walsham of St. Bartholomew's Hospital; that, namely, of the introduction of the whole hand into the rectum. This method was employed in our case (above referred to) of stricture of the sigmoid, but, owing to the folds of the canal, the stricture was not reached; and it was well that it was not, for at the necropsy subsequently, the bowel at the seat of stricture gave way on the slightest traction. Mr. Walsham also had failed in detecting a stricture of the sigmoid flexure by this means; so that, valuable as the method may be, it cannot be fully relied on, and, moreover, it should be practised with the greatest caution.

But, after all, from what has gone before, it will be seen that, in our opinion, the precise determination of the seat of stricture is not of primary importance. In determining this seat, we are thrown back upon statistics: a knowledge of which will be a valuable guide, and they should be taken into prominent account when forming a diagnosis. We know that three-fourths of the cases of stricture involve the rectum and the sigmoid flexure; and we know that, of the remaining one-fourth, a very small proportion are seated above the ileo-cæcal valve. Nor if we have arrived only at so imperfect a diagnosis as one based upon mere numerical averages, is our line of treatment at all the less secure. For we know, also, that the chief part of the passage to suffer from the effects of stricture of the large bowel is the cæcum; and we know that, if the ascending colon be opened, in 90 per cent. of these cases the opening will be above the seat of stricture, and will also give relief to the overdistended cæcum; whilst, as for the remainder—that is, those cases in which colotomy fails

in its object—enterotomy should be performed and relief thus afforded, although it may be with but a very imperfect conception as to the exact locality of the source of obstruction.

[Since this paper was written, we have been informed by Mr. Maunder that, after hearing the views expressed therein respecting right colotomy before gastro-enterotomy, he was prepared to act on the suggestion in a case under his care ; but the necessity for enterotomy did not arise, as he found the right colon distended.]